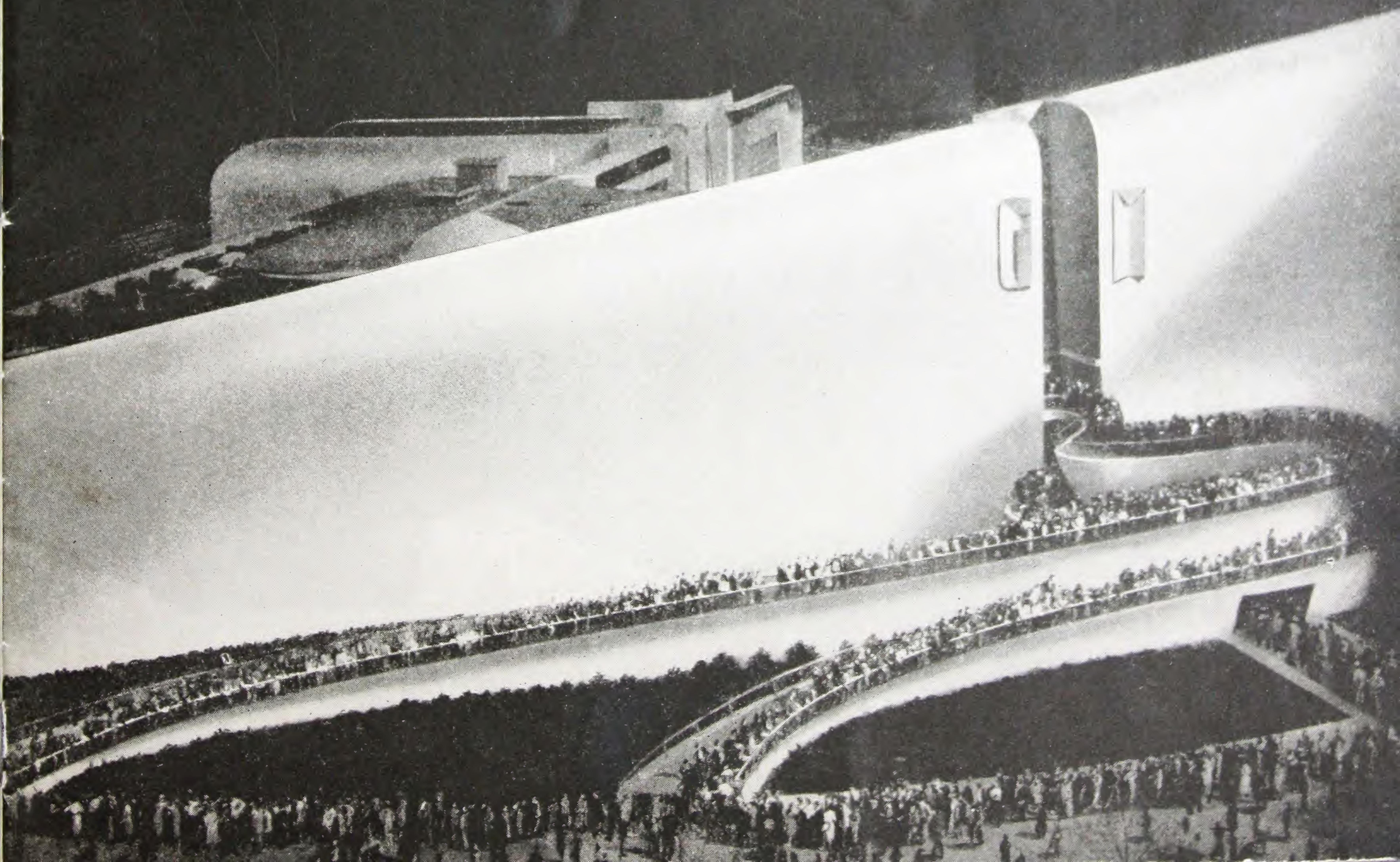


FUTURAMA



A GREETING TO OUR GUESTS:

It is the hope of General Motors that the visitor to its HIGHWAYS AND HORIZONS exhibit at the New York World's Fair will be inspired with a greater realization of the fact that "the world of tomorrow" can be made an infinitely better place in which to live.

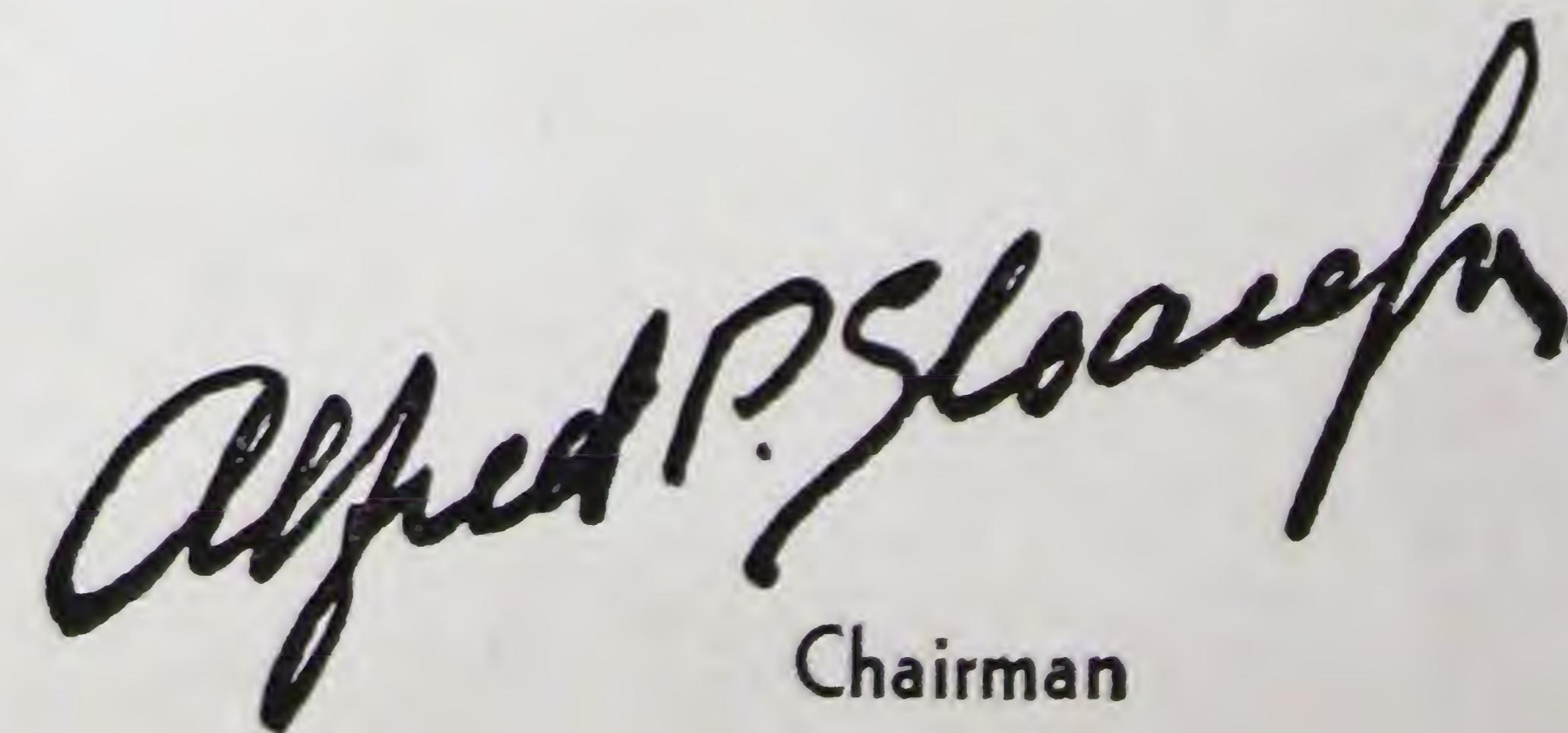
The FUTURAMA, highlight of the World's Fair, is designed, not as a projection of any particular highway plan or program, but rather to demonstrate in dramatic fashion that the world, far from being finished, is hardly yet begun; that the job of building the future is one which will demand our best energies, our most fruitful imagination; and that with it will come greater opportunities for all.

History shows that the progress of civilization has run parallel to advancement in transportation.

New communities, new enterprises and new opportunities have everywhere followed the development of new and better means for moving goods and people. But progress in transportation—the reduction of distance in terms of time and cost—is, in a larger sense, only a symbol of expanded horizons in every field of activity.

As an expression of this broader concept, General Motors hopes that its HIGHWAYS AND HORIZONS exhibit will serve as a constructive "investment in the future" for everyone, everywhere.

Sincerely,



Alfred P. Sloan, Jr.

Chairman



FUTURAMA FACTS

● A half-million buildings and houses—thousands of miles of multi-lane highways—more than a million trees—rivers, lakes and streams—snow-capped mountains—rich, flowering countryside—industrial centers—college and resort towns—great, towering cities—these, and countless other wonders of the future, combine to make the FUTURAMA the most breathtaking achievement of its kind on record.

As the FUTURAMA winds for a third of a mile in and about on several levels of the General Motors Highways and Horizons building, one marvels at the vastness of its 35,000 square-foot area; the imagination and inspiration of its concept; the perfection of its design; and the minuteness of its every detail. With the aid of aerial photographs and maps of many sections of the United States, the FUTURAMA was created from 408 separate sections made by hundreds

of skilled artists and craftsmen working under the direction of Norman Bel Geddes, designer, and with George Wittbold, builder.

The moving conveyor—or "carry-go-round"—from which visitors view the FUTURAMA carries 552 sound-chairs. Its capacity is about 2,150 persons per hour, or a total of approximately 28,000 persons per day. The main unit of the sound mechanism, which explains the FUTURAMA to each visitor as he tours the area, has been described as "twenty-tons-of-voice."

These are only a few of the many features and interesting details which combine to make the FUTURAMA and the HIGHWAYS AND HORIZONS exhibit in its entirety truly, "the hit attraction of the World's Fair."

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Descending ramps through the vast, spectacularly illuminated Map Lobby, visitors approach the FUTURAMA. An unseen voice describes changes on a huge map, which appears to be suspended in light. One hears:

"General Motors BIDS YOU WELCOME..."

"General Motors bids you welcome to its HIGHWAYS AND HORIZONS exhibit at the New York World's Fair.

"The history of American roads is the history of our civilization as it marched westward from the Atlantic to the Pacific—roadways forging ever onward through mountain, desert and forest barriers, leaving in their wake great thriving cities, industrial centers and prosperous farms.

"General Motors salutes the men who pioneered these roads. General Motors salutes the United States Bureau of Public Roads—the highway officials of our states, the traffic administrators of our cities and the individuals and organizations everywhere who are con-

tributing so importantly to highway progress for the future. On the map you see our present national highway system shown in relation to the volume of traffic flow. Where the traffic is heaviest, the highways are shown to be widest.

"While much has been accomplished in improving our highways, actually in many sections today's traffic is moving on roadways designed for yesterday. With the continued improvement of the motorcar and its ever-increasing contribution to our daily lives, our highways must be improved and expanded. Let us see what might occur, if for the next twenty years our highways were not improved. The lights change and the projection now shows what congestion would result by 1960

if our highways remained at a standstill. The green extended widths show the increased traffic flow estimated by 1960. During the next twenty years motor traffic on some of our main highways is expected to increase by as much as 100 per cent—particularly in and about metropolitan areas. The number of motorcars by 1960 may reach from between 35,000,000 to 38,000,000. Anticipating this, highway officials and engineers are constantly at work on ways and means to improve our future roadways.

"Another change of lights and on the map in red is indicated how the 1960 congestion may conceivably be relieved through the development and use of express Motorways—particularly through and between our larger cities.

"In presenting **HIGHWAYS AND HORIZONS**, General Motors seeks to show that highway progress will be an even more important factor in the world of tomorrow than it has been in the world of yesterday.

"And now on its magic 'carry-go-round' General Motors invites you on a tour of future America. The moving chairs below the map will transport you into 1960."



Now the visitor is seated in a traveling sound-chair. The FUTURAMA tour begins. One glides silently into the FUTURAMA—world of 1960—as the unseen voice—now coming from the chair—speaks again:


"COME TOUR THE FUTURE . . .

with General Motors! A transcontinental flight over America in 1960. What will we see? What changes will transpire? This magic Aladdin-like flight through time and space is Norman Bel Geddes' conception of the many wonders that may develop in the not-too-distant future. Now we have arrived in this wonder world of 1960! Sunshine, trees, farms, hills and valleys, flowers and flowing streams . . . this world of tomorrow is a world of beauty. These eternal things wrought by God are lovely and unchanging.

"But Man has forged ahead since 1940. New and better things have sprung from his industry and genius. Since the beginning of civilization transportation and communication have been keys to Man's progress,—his prosperity,—his happiness. Twenty years have passed since 1940. What wondrous changes and improvements have developed in our national highways! Here are the farm roads of the community. Most of these fine farm roads existed in 1940. But since then they have been improved and made to flow into great Motorways.

"Here we see one of our 1960 express Motorways. By means of Motorways of this type, conveniences and necessities are brought to the farmer's door and he in turn has access to broad, outlying markets. This superb one-direction highway, with its seven lanes accommodating traffic at designated speeds of 50, 75 and 100 miles an hour, is engineered for easy grades and for curves that require no reduction in speed. Cars from the farm roads and feeder lanes join the Motorway traffic at the same speed as cars traveling in the lane they enter. To insure safety, the various lanes are safeguarded by border separators and grass stripping.

"The bridge-like structure on the Motorway is a traffic control tower, from which efficiently trained experts advise



drivers by radio control signals when and how they may safely move from one traffic lane to another.

"Directly ahead is a modern experimental farm and dairy. Note the terraced fields and strip planting. The fruit trees bear abundantly under individual glass housings. Strange? Fantastic? Unbelievable? Remember, this is the world of 1960!

"Here is an aeration plant purifying the lake water and distributing it for hundreds of miles throughout the countryside.

"Is this Motorway actually the roadway of 1960? Perhaps. We only know that the world moves on and on, and that the highways of a nation are what set the pace for advancing civilization. Engineers



and highway officials developed America's roadways from wagon trails in the 19th century to skyways and clover-leaf intersections back in 1940.

"Ahead is a uniquely designed bridge crossing a small stream of water. The express Motorway continues its route without interruption. 1960's motorists speed along in comfort and security as they approach

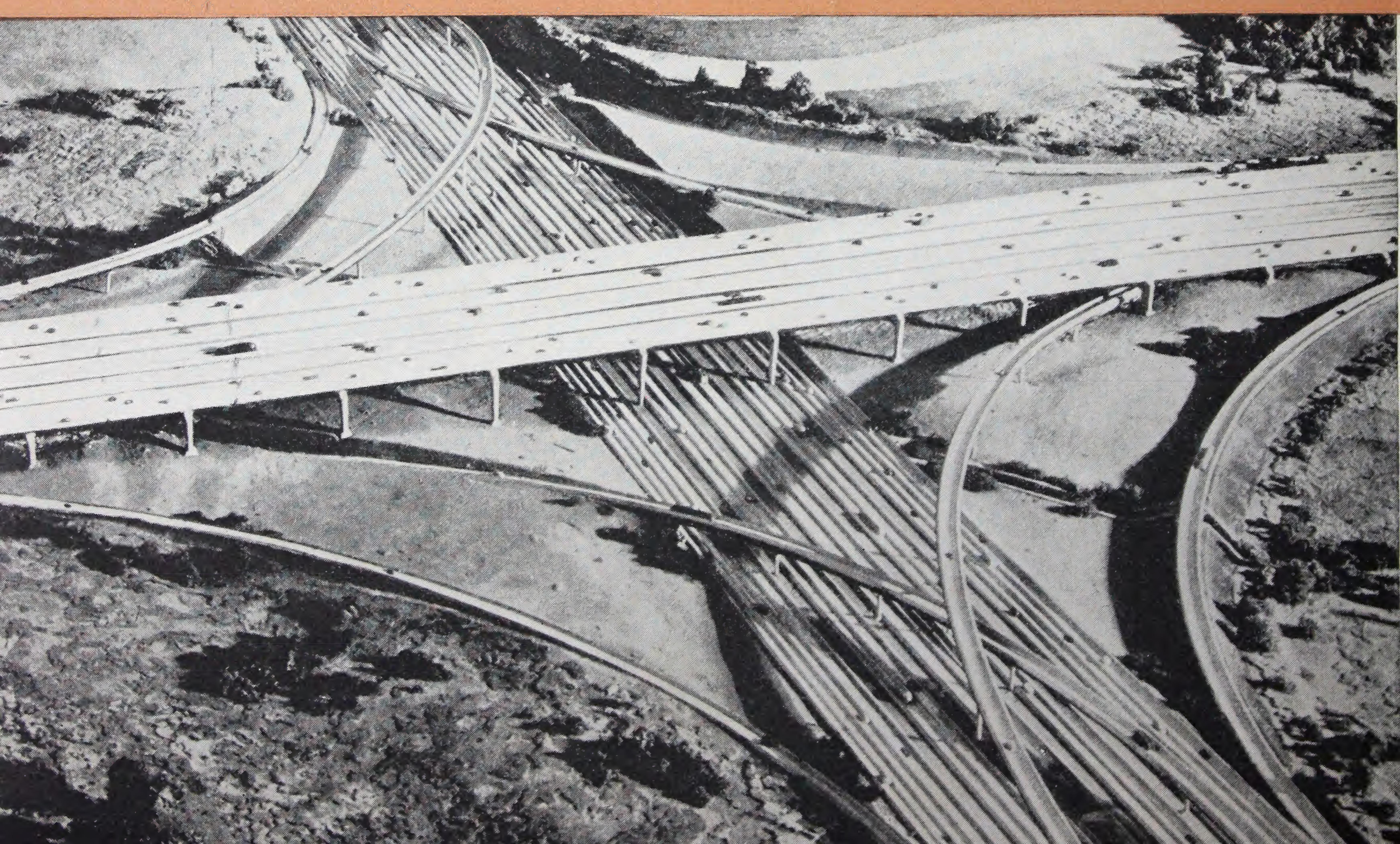
a modern university center. Here, in buildings of simple but functional architecture, the youth of 1960 study for and envision their future in a world of still greater progress and achievement. As a reminder of 1940, here is a clover-leaf intersection. This vision of 1960 dramatizes possible highway progress—highways to new horizons of a country's welfare and happiness.



"Looming ahead is a 1960 Motorway intersection. Here is the crossing point of two double-directional Motorway routes. Here is highway engineering at its most spectacular. Traffic may move safely and easily without loss of speed. By means of the ramped loops, cars may make right and left turns at rates of speed up to 50 miles per hour. The turning-off lanes are elevated and depressed. There is no inter-

ference from the straight ahead traffic in the higher speed lanes. The motorist of 1960 finds this intersection safe and efficient. Actually, in proportion to the Motorway's traffic volume, this intersection occupies no greater area than the cloverleaf of 1940.

"Night falls on the countryside and wives are serving supper to hungry families and farm hands. The two-



directional traffic of the Motorway, which merged at the intersection, separates again. The highway surface is automatically lighted by continuous tubing in the highway safety curbing, which evenly illuminates the road surface.

"But, what's this just ahead? An amusement park in full swing. A merry-go-round—a ferris wheel—boys

and girls shrieking with glee on a pretzel-like sky-ride. Here's fun and merriment in this world of tomorrow.

Just as improved highways have benefited the farmer, so have they added to the comforts of living and economic welfare of those in industrial communities. Here is a prosperous and thriving steel town, with efficient and safe access to all advantages



within driving distance. In the foreground is a model airport. Notice the glowing Bessemer furnaces, the river and rolling mills. Railway trains run in and out on fast schedules, carrying products of the community to consumers. A spectacular, thrilling composite of motor, air and rail transportation in the world of tomorrow!

"Here is a mountainside stone quarry. And now for a closeup view of an enlarged section of 1960's ex-

press Motorway. Along the ledge of this beautiful precipice traffic moves at unreduced rates of speed. Look closely and you will see the various speed lanes and how they are regulated.

"Dawn is breaking. Another day is born.

"This 1960 drama of highway and transportation progress is but a symbol of future progress in every



activity made possible by constant striving toward new and better horizons.

"Who can say what new horizons lie before us if we but have the initiative and imagination to penetrate them—new economic horizons—new social horizons—new horizons in many fields, leading to new benefits for everyone, everywhere.

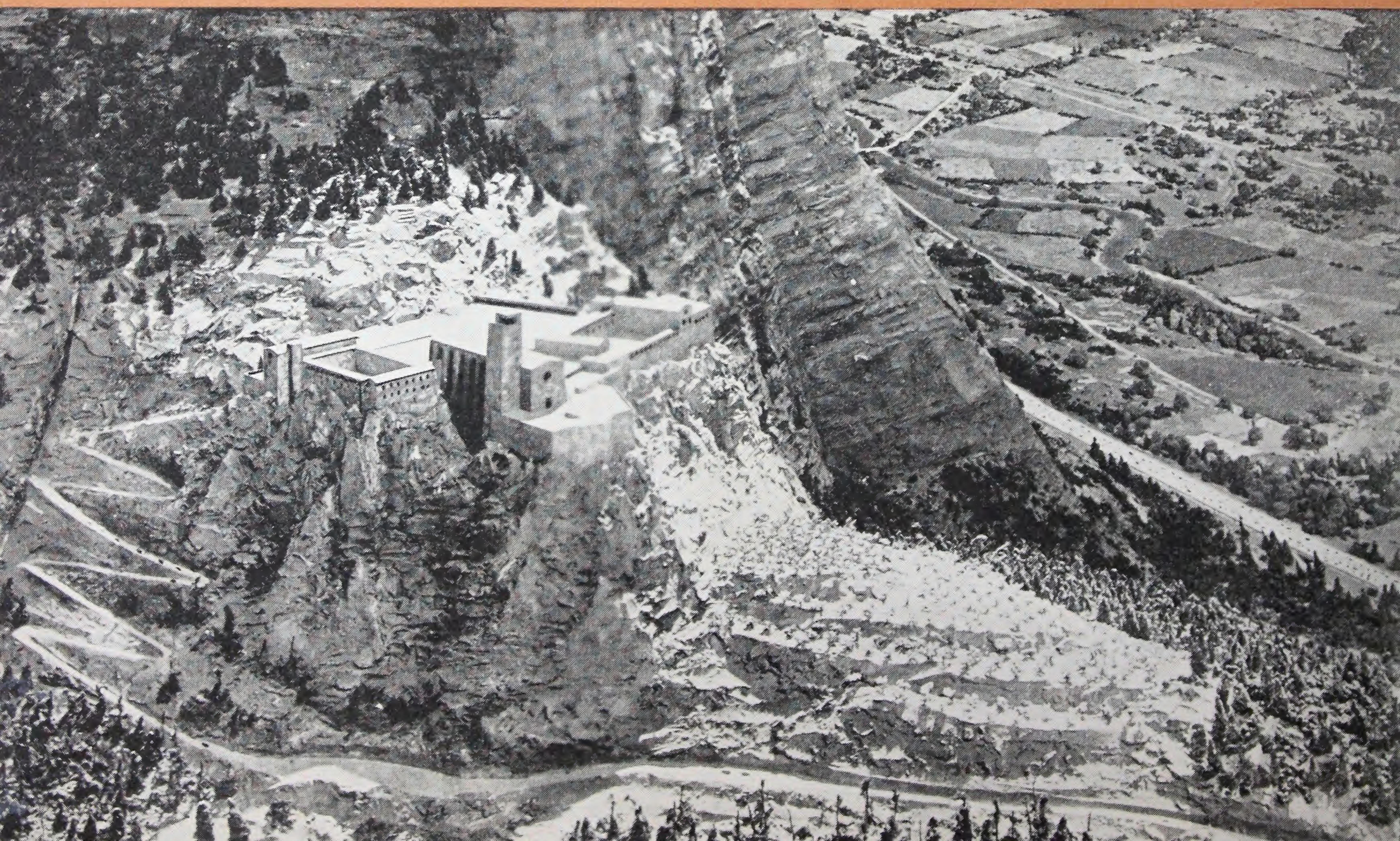
"Now we are traveling high above the mountains and valleys below—a bird's-eye view of a paradise for vacationers. With the fast, safely-designed highways of 1960, the slogan "See America First" has taken on new meaning and importance. The thrilling scenic features of a great and beautiful country may now be explored—even on limited vacation schedules. In the foreground is a thriving manufacturing community.



"The Motorway crosses the lake over a double-decked bridge—high speed traffic on the upper level—slower traffic on the level below. Contrast the straight, unobstructed path of the Motorway with that of the twisting, winding, ordinary road. Now the seven-lane Motorway stretches toward its goal, the steep mountain climb challenging ahead. The high and low speed lanes of the Motorway

separate for the mountain journey. One marvels at the complete accord of this man-made highway with the breath-taking scenic beauty of its route.

"Look closely and you will see a quiet and peaceful religious retreat, seemingly growing from the rocks as it looks out over the lake and foothills.

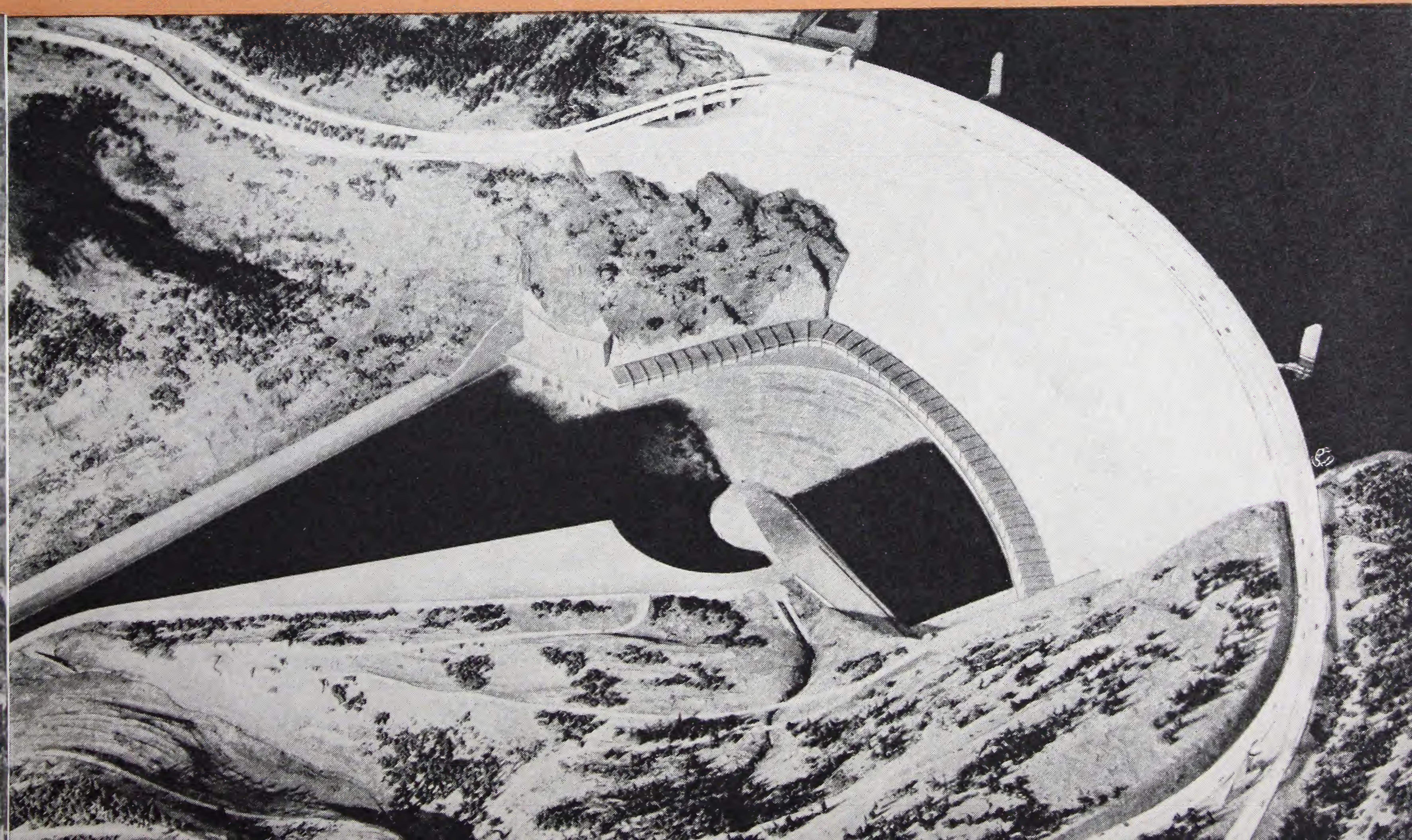


"The slower lanes of the Motorway wind in and about the foothills, but from this point on, the higher speed lanes tunnel, bridge and cling to the precipitous rock-faces. In the valley ahead is a picturesque resort town. Farther on is a canal with a series of flood control locks. Just beyond is a miracle in engineering—a giant mountain lake dam with its spillway, companion buildings and hydro-electric

power plants, providing service for hundreds of miles around.

"The various speed lanes converge on one end of this dam and continue their route across the top of it.

"But now we are arriving almost on top of the world—the world of 1960! The altitude is more than



10,000 feet. In the foreground as we travel along note the winter hotel lodge, the mountain cabins—the ski run. The Motorway continues through the mountains, although it is only visible here and there as it threads its way along.

"Descending the mountains are the various lanes of the Motorway, spreading and winding down toward

the valley and cities below. Far across in the distance is a vast, towering city—look far, far across the valley. The city is forty miles away. Directly ahead is another city.

"This world of 1960 has been enriched by new concepts in science and research, new techniques in production and distribution—and by a new under-



standing of the true function of industry as an integral part of a nation's social and economic life.

"Now another large city looms ahead. Outside it is an airport with its hangars and planes. An oil refinery rises in the distance. The Motorway enters this city over a spectacular suspension bridge, spanning the navigable river on which the city is situated.

"This is a close-up view of the great suspension bridge, forming the motor-traffic gateway to the city. The feature of this bridge plan and design is the elimination of congestion and bottle-necking of the various converging Motorways and feeder roads. See how the beautiful landscaping and the architectural features conform to the modern engineering of the highways.



"Through an ingenious system of traffic flow and direction from the various converging roadways, and by means of the ascending and descending ramps, a four-tier approach to the great bridge is formed. There is no interference or cutting in of traffic lanes. Cars may be driven on and off the bridge without risk of collision and with speeds maintained.

"And directly ahead we again see the river city with its four-tier bridge approach. But now we near the great metropolis of 1960. We will bank high over the city for a spectacular view of its many wonders.

"In 1940 this American city actually existed. Its population then was approximately a million persons. Today—in 1960—it is much larger, divided



into three units, residential, commercial and industrial. Nine miles out from the city is a vast airport.

"Here is an American city replanned around a highly developed modern traffic system and, even though this is 1960, the system as yet is not complete. Whenever possible the rights of way of these express city thoroughfares have been so routed as to displace

outmoded business sections and undesirable slum areas.

"The city of 1960 has abundant sunshine, fresh air, fine green parkways, recreational and civic centers—all the result of thoughtful planning and design. There are approximately 38,000,000 motorcars in this America of 1960—almost a third more than in

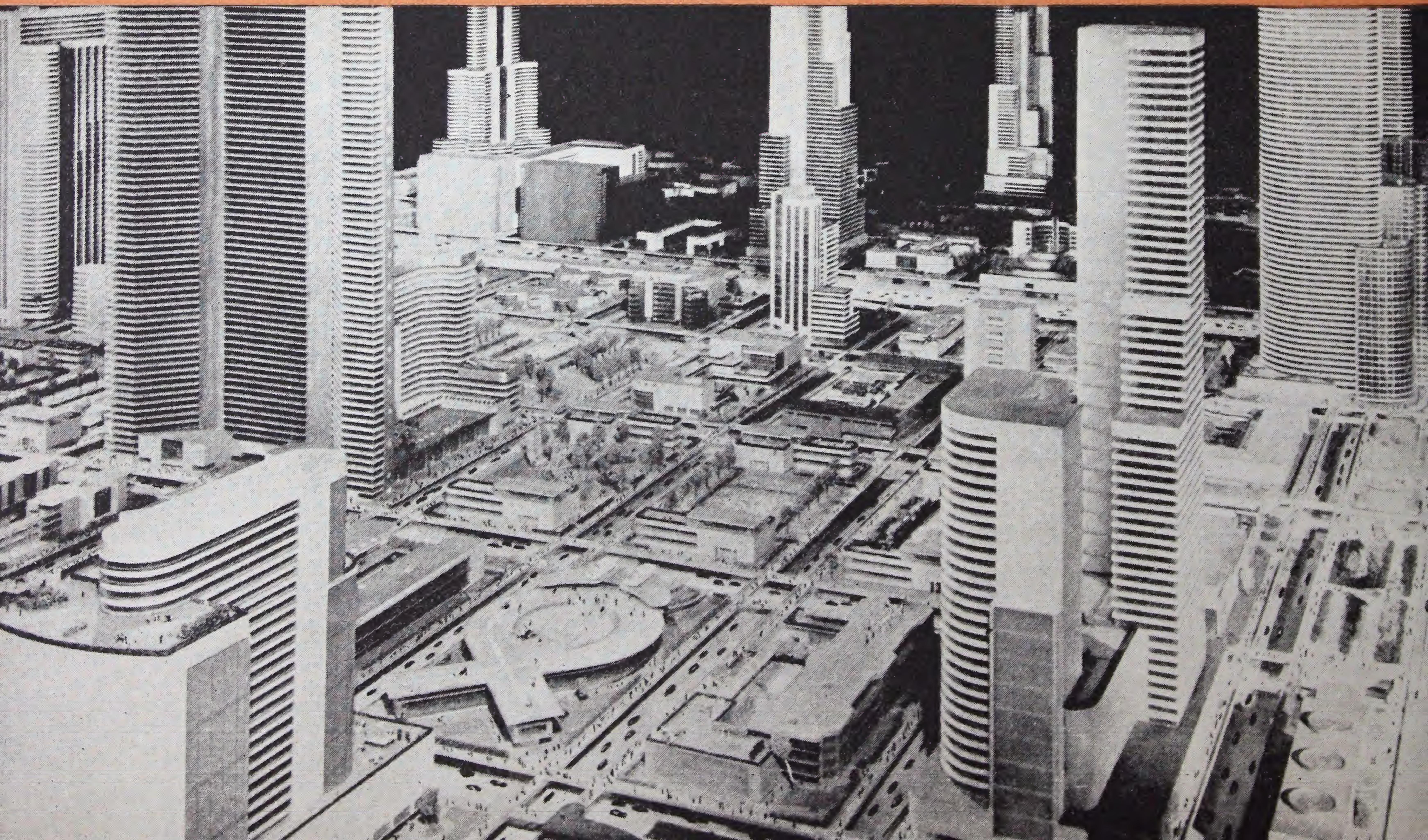


1940—motorcars which have created more and more conveniences and more and more jobs for more and more people.

"Here you see a close-up view of one section of the great metropolis of 1960. The traffic system is the result of exhaustive surveys of the highway and street problems of the past. Modern and efficient

city planning—breath-taking architecture—each city block a complete unit in itself. Broad, one-way thoroughfares—space, sunshine, light and air.

"But here is an important intersection in the great metropolis of 1960! On the four corners are an Auditorium, a "Department Store," an "Apartment House" and an Automobile Display Salon. In a



moment we will arrive actually on this very street intersection—to become a part of this self-same scene in the World of Tomorrow—in the wonder world of 1960—1940 is twenty years ago! ALL EYES TO THE FUTURE.

"And now in each of the four buildings on this street intersection of the future General Motors invites you

to visit its many interesting and exciting displays and exhibits. See the thrilling science stage show in the Auditorium—see the beautiful motor car display—the Diesel, Frigidaire, Fisher Body and Overseas exhibits.

"General Motors bids you welcome to this magic city of progress."



PREVIEWS OF PROGRESS • RESEARCH IN REVIEW

● Downy yarns made of milk! Eyeglasses made of coal, air and water! Glass that bends! The "Frig-O-Therm," that cooks and freezes at the same time! The "Talking Flashlight," transmitting speech over a light beam!

Startling, perhaps, but true—and only a few of the many wonders of modern science seen in the General Motors "Previews of Progress" stage show. Each hour, on the hour, from 10 A.M. until closing, throngs stream from the FUTURAMA ride to the beautiful, air-conditioned GM Auditorium for a scientific look into the future.

Here, on an ingenious revolving stage, are presented the wonders of today that are likely to become a vital part of our daily lives in the World of Tomorrow.

No mere stunt show—although for sheer entertainment it rivals anything on the midway—"Previews of Progress" is sponsored and staged by the General Motors Research Laboratories. It is true science, served with a dramatic impact that delights all ages and tastes. It is essentially a visual demonstration of what science is doing today and what it may do in the future.

● In the "Casino of Science," located directly behind the Frigidaire exhibit, three ten-minute lecture-demonstrations are presented regularly on the fascinating subjects of friction, fuels and elasticity. As the results of research pass in review, you learn how apparently rigid objects bend under slight pressure, you watch a "paper saw" in operation, you see what goes on inside the cylinder of a gasoline engine.

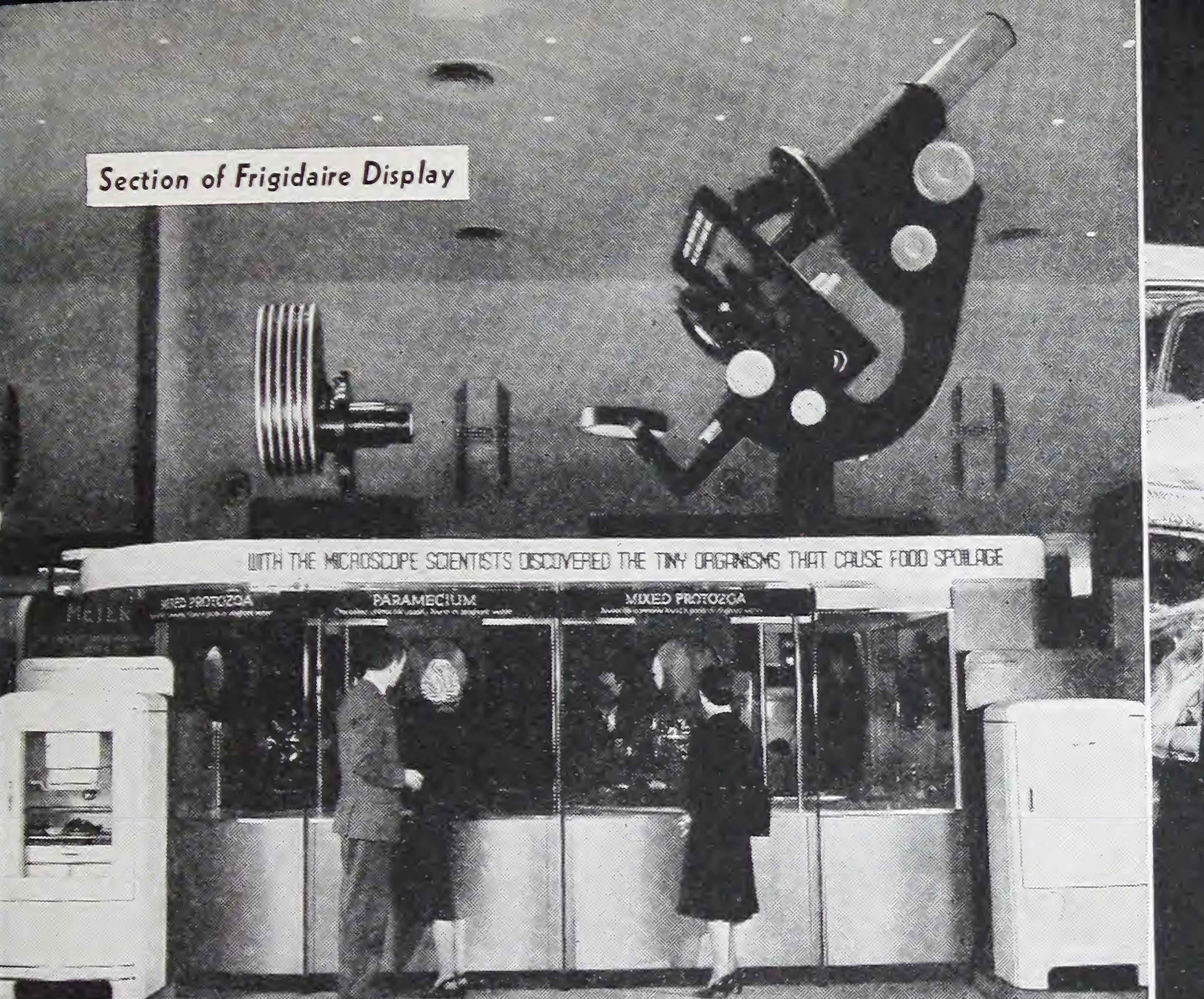
Adjoining the "Casino of Science" are colorful, animated dioramas portraying the growth of some of our leading industries and showing how literally millions of jobs have been created through the work of pioneer inventors.

In addition, interesting and instructive displays from the General Motors Research Laboratories are arranged around the room, including a sensitive device that measures the amount of heat radiated by a person's hand and an exhibit showing how holes can be bored in a human hair. Other displays in this group demonstrate precision in balancing, and precision in measuring stresses and deflection. These exhibits have the added feature that they can be operated by the visitors themselves.

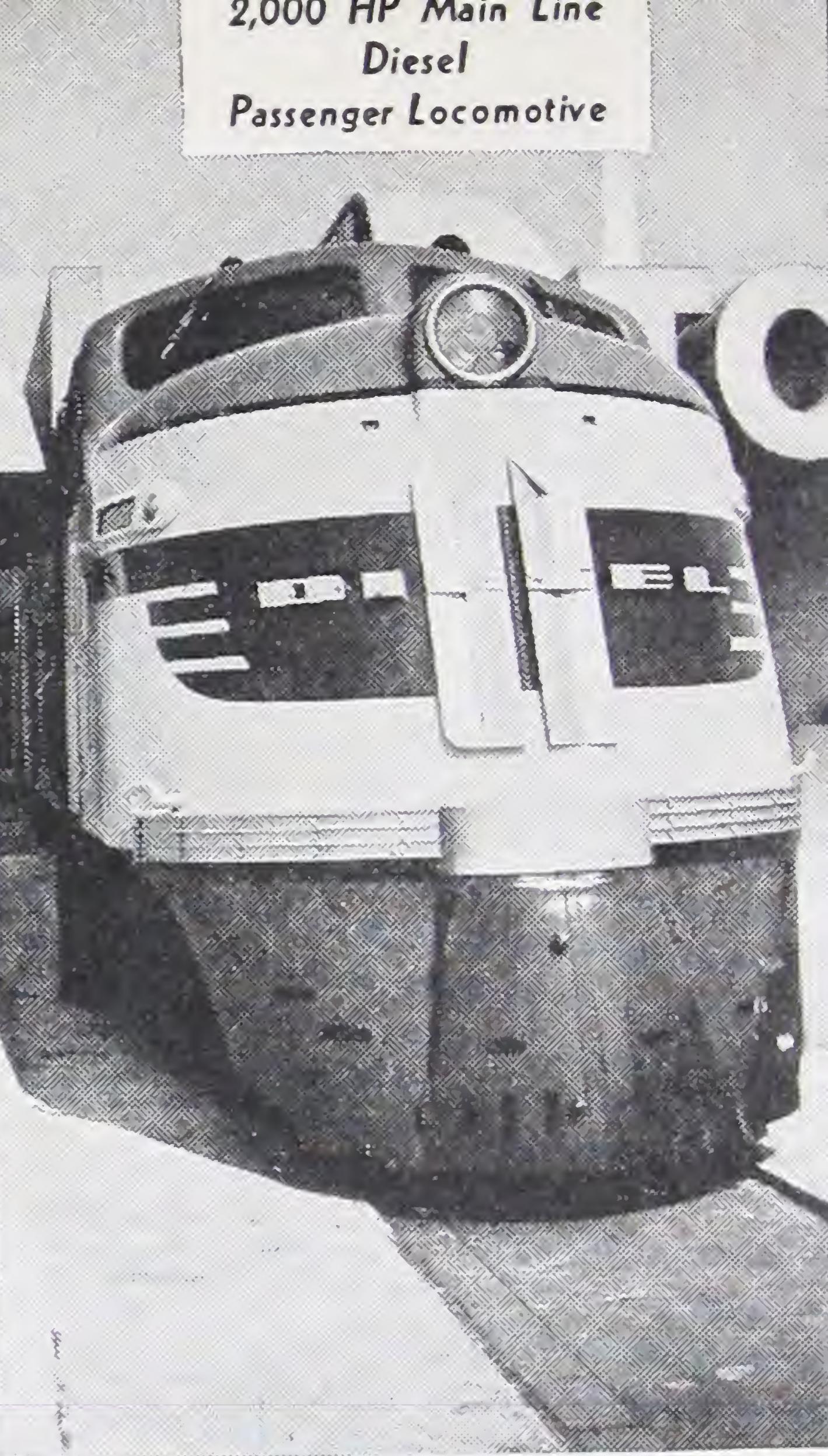
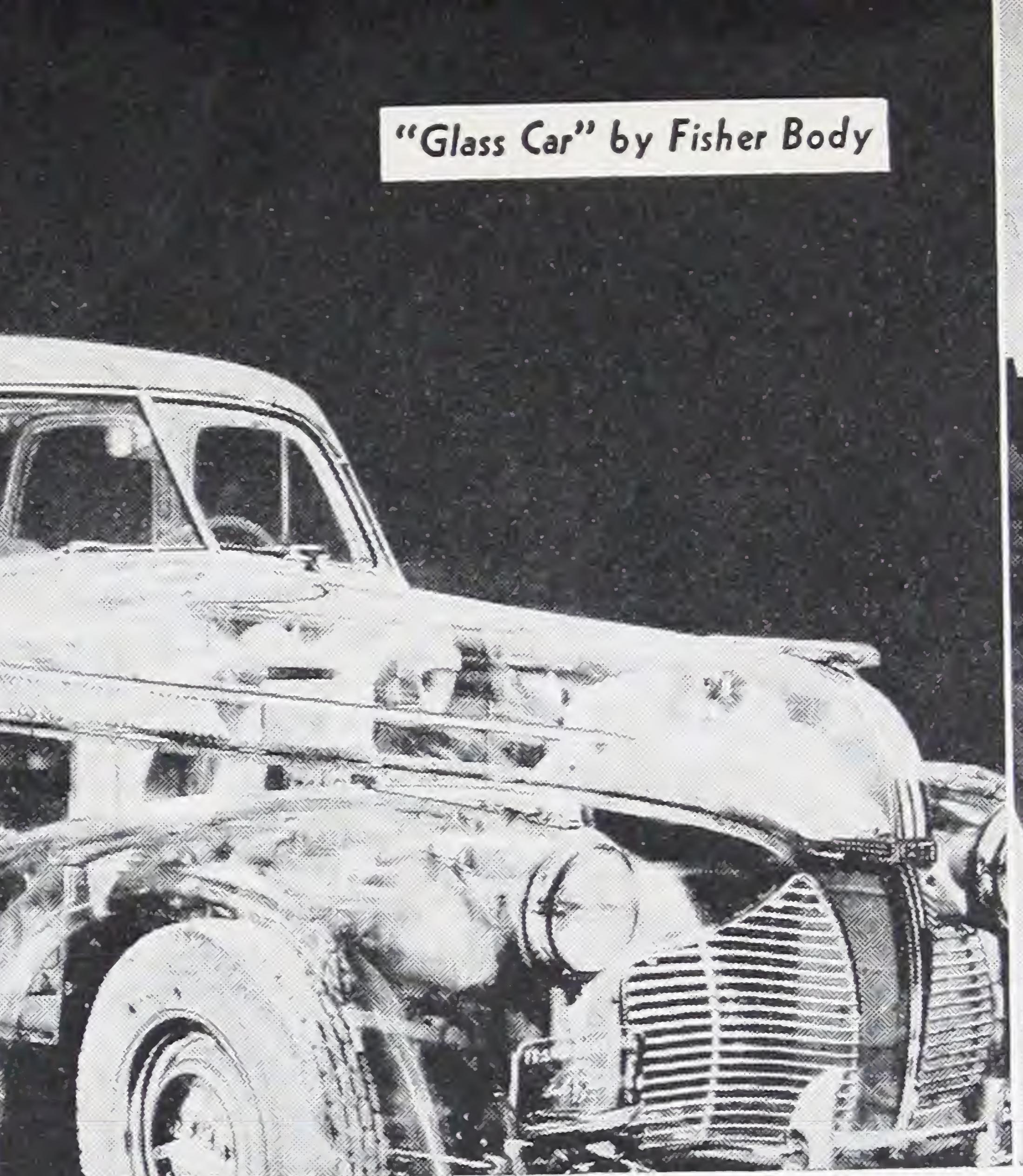


2,000 HP Main Line
Diesel
Passenger Locomotive

Section of Frigidaire Display



"Glass Car" by Fisher Body

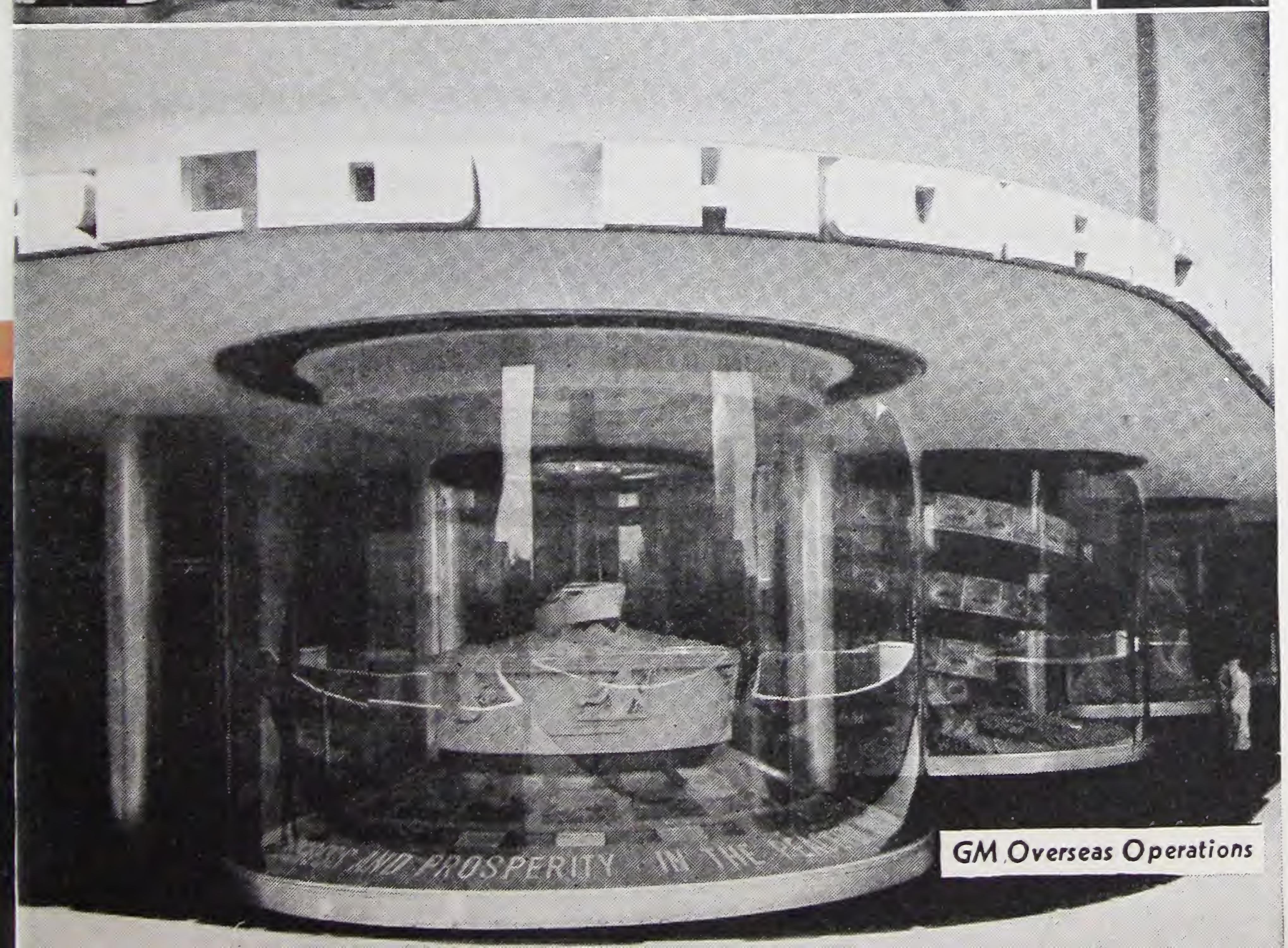


These General Motors Units Welcome You To Highways and Horizons

AC Spark Plug Division
Allison Division
Buick Motor Division
Cadillac Motor Car Division
Chevrolet Motor Division
Delco Appliance Division
Delco Brake Division
Delco Products Division
Delco Radio Division
Delco-Remy Division
Diesel Engine Division
Electro-Motive Corporation
Fisher Body Division
Ternstedt Mfg. Division
Frigidaire Division
General Exchange Insurance Corporation
General Motors Acceptance Corporation

General Motors Truck & Coach
Division of Yellow Truck and Coach Mfg. Company.
GM Overseas Operations
Guide Lamp Division
Harrison Radiator Division
Hyatt Bearings Division
Inland Manufacturing Division
Moraine Products Division
New Departure Division
Olds Motor Works Division
Pontiac Motor Division
Research Laboratories Division
Saginaw Malleable Iron Division
Saginaw Steering Gear Division
United Motors Service, Inc.

Visitors and officials interested in traffic and highway safety are cordially invited to visit the TRAFFIC AND SAFETY CENTER.



GM Overseas Operations

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In this spectacular motorcar display salon of unique design General Motors proudly presents an array of the latest models of CHEVROLET, PONTIAC, OLDSMOBILE, BUICK, LA SALLE and CADILLAC.